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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/265,926 03/11/99 DALES J P30920

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CORPORATE INTELLECTUAL PROPERTY-UW2220
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EXAMINER

BERCH, M

ART UNIT	PAPER NUMBER
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1611

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DATE MAILED: 06/14/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/265,926

Applicant(s)

Dates

Examiner

Mark L. Berch

Group Art Unit
1611



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 5-7 and 10-20 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 5-7 and 10-20 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☒ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7 and 10-14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The dechlorination via hydrogenolysis reaction is described by original claim 8, because it says that the dechlorination is done in the manner of EP 302644, and EP 302644 has the hydrogenolysis at page 7, line 55. However, dechlorination via hydrolysis (to give the OH) is not seen in this reference. The remarks state that this can be found in EP 141927, page 5, line 17. However, no such process exists on that page. Moreover, even if it were there, the instant specification does not state that the process of EP 141927 is to be used for dechlorination via hydrolysis. In fact, the only mention of EP 141927 is on page 1 of the specification, where it states that ACP (the

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starting material for the current claims) is disclosed in EP 141927. That is, this application has no Claim-8-like statement about the use of EP 141927.

Claim 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This claim is garbled or incomplete. The species named in this claim is not made by the Claim 15 process. Perhaps applicants intended the species recited in claim 5. If applicants intend the recited species, they will need to write an independent claim to prepare it, or add step(s) to get to this species.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5 and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 302,644.

The process is the same as the prior art, insofar as it produces $X = Cl$. That is, one seeking to follow the reference's teaching to get the $X = Cl$ final product would land up with precisely the claimed process.

In the parent case, applicants had argued that there were a large number of choices for R_2 , too large for an anticipation. However, there is a much narrower list on

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page 7, lines 8-9, which has 3 or 6 items in it, depending on how one counts. A genus this small constitutes an anticipation of every member. cf.. *In re Petering*, 133 USPQ 275; *In re Sivaramarishnan*, 213 USPQ 441; *In re Schaumann*, 197 USPQ 5.

Applicants in the parent case cited *In re Arkley*, 172 USPQ 524, but that case turned on the issue of description. Applicants also cited *In re Brown*, 141 USPQ 245. But the facts were utterly different there. As the CCPA stated, "... we do not think that Clark's reference to his unsuccessful attempts to prepare fluorine-containing silicone homopolymers would place such homopolymers in the possession of the public."

There was nothing unsuccessful about what was done in the reference. The statement that the reference does not "specifically disclose them" is simply untrue. The reference says specifically Chloro as substituent, and that is exactly what applicant has. Similarly, while applicants said in the parent case that "the teachings of EP 302644 do not carry out the sequence of steps as claimed in the present invention", that is exactly what the reference does teach. There is no difference between the processes.

With regard to claim 5, similar reasoning is available. Note Formula I. R_3 as amino is clearly preferred, as it is the sole choice seen in the final product. As for R_1 , two choices are given as preferred at page 7, line 7, and for R_2 , there is a genus of 6 as noted above. A Markush of 12 is deemed to be an anticipation of all 12.

With regard to claims 17-18, again, that is exactly what the reference teaches; see page 7, line 7. With regard to claim 19, assuming that the compound is as named

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in the claim, that correspond to (A), where $R_a = R_b = \text{acetyl}$, $X = \text{Cl}$. The choice of $R_a = R_b = \text{acetyl}$ is seen at page 7, line 6 where it is named as the sole preferred choice. The 6-Cl feature is seen in many examples and the abstract (or page 5, line 16) gives 15 choices, again, enough for an anticipation of all 15.

In the response after final, applicants in the parent case described on page 11 "the present invention" but that process has step e), the final removal of Cl. That step does not exist in Claim 15. Patentability cannot be asserted on the basis of limitations (here, steps) which do not exist in the claim. Claim 10, which does include dechlorination, is thus not rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 -7 and 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 302,644.

As set forth above, the claimed process falls within the teaching of EP 302644. Although the working example does in fact have an early dechlorination, the process as described does not require it, and therefore that would be obvious, as it is what the reference says. With regard to claims 14 and 20, the use of an appropriate

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decarboxylating agent would be obvious to one of ordinary skill in the art, given the page 7, line 49 teaching of "a base such as Na ethoxide". Similarly, one skilled in synthetic organic chemistry knows how to avoid using more than the necessary amount of a reagent. L as bromo is seen in Description 11. Claim 5 is obvious for reasons set forth above; selection of these choices is clearly pointed to

Applicants in the parent case urged unexpected effects, viz, their 41% yield versus the 10.6% of the prior art (Scheme 1 vs. Scheme 2). This is unpersuasive for the following reasons:

- A. The difference might have arisen from a different decarboxylation process. The prior art process (ex. 3) used NaOEt at room temperature. Applicants used NaOMe under cooling. Applicant's considerably better yield might have arise from that. Note that this point applies even to Claim 20, insofar as the temperature aspect of it is not reflected in the claim 20 limitations.
- B. Similarly, the reduction with NaBH_4 was also done differently. The prior art used elevated temperatures and refluxing t-butanol. Applicants used CH_2Cl_2 with cooling, and perhaps that is what accounted for the better yields.
- C. Another important difference is in the coupling step, which is especially relevant because the coupling step is identical in EP 302644 and the claims. This step (Description 11 in EP 302644) involves the exact same materials and goes in 56% yield, whereas applicants presumably got something in excess of 70% yield. This may have arisen from the fact that applicant did the reaction for longer and at a higher

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temperature (40° C vs. 60° C - 63° C), and so the prior art may simply not have gone to completion. At any rate, this coupling step cannot properly be part of the yield comparison because at this point, the process is identical to that of the prior art working example. Or perhaps this significant difference in yield arose from a more efficient workup.


D. The declaration is unexecuted.

Applicants in the parent case also asserted that the prior art method is "inconvenient for use on a large scale", but no evidence was presented that. Applicants can avoid this rejection by side-by-side comparisons, using the same, e.g. temperatures.

Applicants asserted in the parent case that their better results arise from keeping the 6-Cl in place, but no actual evidence is presented that this is the case, as opposed to more prosaic factors, such as different decarboxylation reagents, different solvents, and more efficient workup.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Mark L. Berch whose telephone number is 703-308-4718.

Mark L. Berch



Primary Examiner

Group 1610 - Art Unit 1611

June 10, 1999